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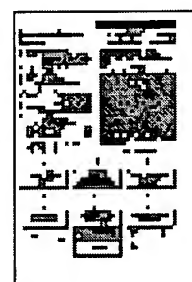
Buy N w: [More choices...](#)Tools: Add to Work File: [Create new Work File](#) Vi w: [INPADOC](#) | Jump to: [Top](#) ☐ [Email this to a friend](#)Title: **JP2000164249A2: NONAQUEOUS ELECTROLYTE AND NONAQUEOUS ELECTROLYTE SECONDARY BATTERY**Country: **JP Japan**Kind: **A2 Document Laid open to Public inspection**Inventor: **HAYASHI TAKASHI;  
TAN HIROAKI;**Assignee: **MITSUI CHEMICALS INC**  
[News, Profiles, Stocks and More about this company](#)Published / Filed: **June 16, 2000 / Nov. 27, 1998**Application Number: **JP1998000336632**IPC Code: **H01M 10/40;**Priority Number: **Nov. 27, 1998 JP1998000336632**

Abstract:

PROBLEM TO BE SOLVED: To provide an electrolyte with low heat generation speed and high safety by constituting with a nonaqueous solvent containing fluorine-containing cyanoethyl ether compound and an electrolyte.

SOLUTION: A nonaqueous electrolyte contains fluorine-containing cyanoethyl ether compound represented by the formula: X-(OR)<sub>n</sub>-OCH<sub>2</sub>CH<sub>2</sub>-CN. In the formula, X shows 1-10C fluorine atom substituted hydrocarbon group, R shows 2-4C alkylene group, and (n) is 0-30. The nonaqueous solvent preferably contains cyclic carbonate and/or chain carbonate, the cyclic carbonate is a compound containing 2-5C alkylene group, and the chain carbonate is a compound containing 1-5C hydrocarbon group. An electrolyte is selected from LiPF<sub>6</sub>, LiBF<sub>6</sub>, and LiOSO<sub>2</sub>R<sub>1</sub>. R<sub>1</sub> shows 1-6C perfluoroalkyl group. A negative electrode containing metallic lithium, a lithium-containing alloy, and a carbon material capable of doping/undoping lithium ions as a negative active material is used.

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**(54) NONAQUEOUS  
ELECTROLYTE AND  
NONAQUEOUS  
ELECTROLYTE  
SECONDARY BATTERY**

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